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CENTRAL FAX CENTER****OCT 16 2006****Remarks**

Applicant respectfully requests reconsideration of this application as amended. Claim 18 has been amended. Claim 25 has been added. No claims have been cancelled. Therefore, claims 1-25 are presented for examination.

35 U.S.C. §101 Rejection

Claims 18-24 stand rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Specifically, the Final Office Action states that the specification discloses carrier waves as an embodiment of the storage medium, and these carrier waves do not fall into any of the four statutory categories of invention. Claim 18 has been amended to recite a "machine-accessible storage medium encoded with content which, when executed by an accessing computing device, causes the computing device to."

As provided in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, "a signal encoded with functional descriptive material is similar to a computer-readable memory encoded with functional descriptive material", and that the latter format would fall into a statutory category (See Guidelines at pg. 57.) Claim 18 now recites a machine-accessible storage medium (or memory) encoded with content (or functional descriptive material. As such, claim 18, and its dependent claims, are now directed towards statutory subject matter. Therefore, applicant respectfully requests the withdrawal of the 35 U.S.C. §101 rejection.

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Claims 1, 2, and 7-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Shek et al. (*Dynamic Spatial...*) in view of Huang et al. (*A Spatial Clustering...*).

Applicant submits that the present claims are patentable over Shek in view of Huang.

Shek discloses a system for broadcast data dissemination in an Intelligent Mobile Information System. The Intelligent Mobile Information System supports information-centered applications that require support for a large number of distributed mobile users collaborating on a common mission and with interests in a common situation domain. Broadcast data dissemination is most effective when each broadcast information packet has multiple interested parties. To maximize the value of multicast dissemination, the system of Shek dynamically clusters similar user profiles into aggregate user classifications that are served by independent multicast channels of custom information packets. (Shek at Abstract.)

Huang discloses an approach that clusters mobile users before downlink beamforming and broadens beams within the beamforming calculation. First, the broadening beamforming scheme is investigated to alleviate inaccuracies in DOA estimation. Then, it is determined how to group the mobile users, with the constraint of separation angle, to enhance downlink beamforming. (Huang at Abstract.)

Claim 1 recites:

A method for beamforming in wireless communications, comprising:
identifying one or more target(s) for which a communication signal is intended;
identifying one or more other target(s) which may benefit from receipt of the communication signal; and
developing a multi-lobe beampattern to transmit the communication signal to the intended target(s) and the identified one or more other target(s).

Applicant submits that Shek in view of Huang does not disclose or suggest developing a multi-lobe beam pattern to transmit the communication signal to the intended target(s) and the identified one or more other target(s), as recited by claim 1. The Office Action acknowledges that “Shek does not disclose or suggest developing a multi-lobe beam pattern to transmit the communication signal to the intended target(s) and the identified one or more other target(s).” (Final Office Action mailed 8/23/06 at pg. 3, pt. 4.) However, the Office Action does cite Huang as disclosing this feature at page 193 and Figure 6 of Huang. (Id.)

The Final Office Action cites Huang generally at page 193 and Figure 6, but provides no explanation for specifically how Huang discloses the cited feature of claim 1. Applicant can find no disclosure or suggestion anywhere in Huang of *developing a multi-lobe beam pattern to transmit the communication signal to multiple users*. Although Huang may discuss grouping users into a cell for downlink beamforming and selective calculation for downlink beamforming weight for a group, Huang does not also discuss transmitting this communication signal to multiple targets via the multi-lobe beam pattern.

Furthermore, in the Response to Arguments section of the Final Office Action, the Examiner relies on the *combination* of Shek and Huang to respond to the above argument. Specifically, the Examiner states that “Shek communicates a signal to multiple users” and Huang discloses developing a multi-lobe beam pattern.” (Id. at pg. 12, pt. 26.) However, applicant submits that utilizing a multi-lobe beam pattern to transmit a same signal to multiple users is not obvious solely from the disclosure in Shek of communicating signals to multiple users. Developing the multi-lobe beam pattern to transmit a signal to multiple users would not be obvious to one skilled in the art.

For the above reasons, applicant can find no disclosure or suggestion anywhere in Huang of the above-cited feature of claim 1. Therefore, as neither of Shek nor Huang individually disclose or suggest developing a multi-lobe beampattern to transmit the communication signal to the intended target(s) and the identified one or more other target(s), any combination of Shek and Huang also does not disclose or suggest such a feature. Therefore, claim 1 is patentable over Shek in view of Huang.

Independent claims 9 and 18 also recite, in part, identifying one or more other target(s) which may benefit from receipt of the communication signal and developing a multi-lobe beampattern to transmit the communication signal to the intended target(s) and the identified one or more other target(s). Therefore, claims 9 and 18, as well as their respective dependent claims, are patentable over Shek in view of Huang for the reasons discussed above with respect to claim 1.

Claims 3-6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Shek in view of Huang, and further in view of Gleeson (U.S. Patent No. 6,477,160). Applicant submits that the present claims are patentable over Shek and Huang, even in view of Gleeson. Claims 3-6 depend from independent claim 1. As discussed above, independent claim 1 is patentable over Shek in view of Huang. Gleeson does not remedy the defects of Shek and Huang in light of claim 1. Therefore, claims 3-6 are patentable over Shek and Huang, in view of Gleeson.

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Applicant respectfully submits that the rejections have been overcome and that the claims are in condition for allowance. Accordingly, applicant respectfully requests the rejections be withdrawn and the claims be allowed.

The Examiner is requested to call the undersigned at (303) 740-1980 if there remains any issue with allowance of the case.

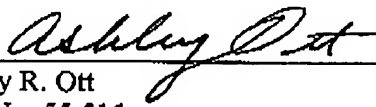
Applicant respectfully petitions for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17(a) for such an extension.

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

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